

# **uFR Online NFC Reader - Android**

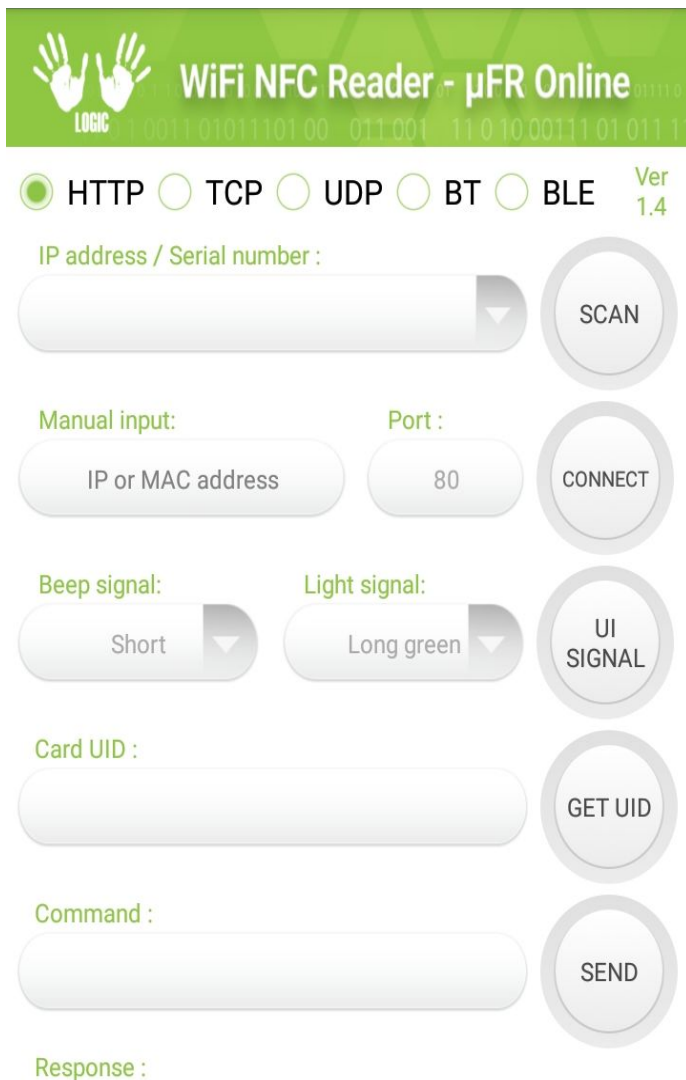
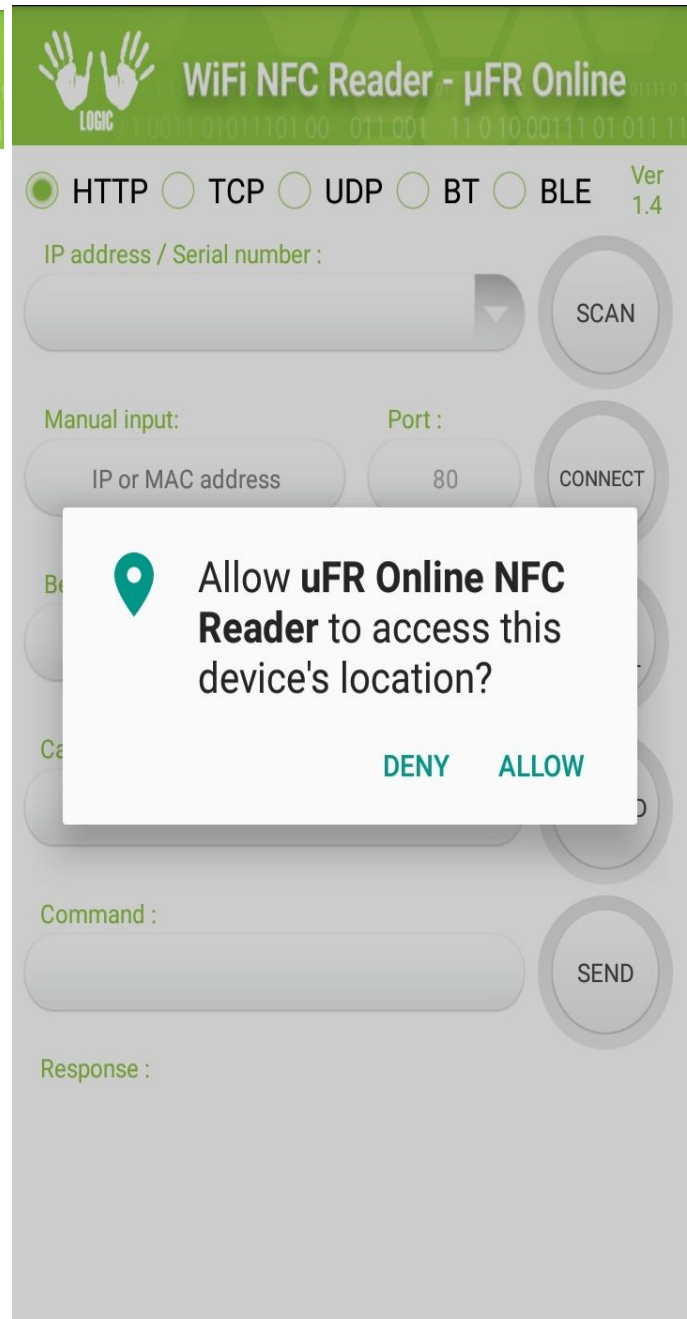
## **1.4 version**

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## Application preview

At the beginning, application will ask you to allow access to device's location. Please allow it to be able to scan uFR Online device's in Bluetooth mode successfully.

## Options

Click on 'SCAN' button to see available uFR Online readers. Notice that you have to be connected at the same network as readers. If you can't find reader ip address by clicking 'SCAN' button, you have an option to manually input ip address. If ip address is manually entered, application will take that ip for work, if field for manual ip address input is empty, application will use ip address from dropdown list. When you select reader's ip address from drop down list and click button 'GET UID' you will be able to see card's uid in text field.

On button 'UI SIGNAL' you will be able to hear sound from buzzer and alternation light signal.

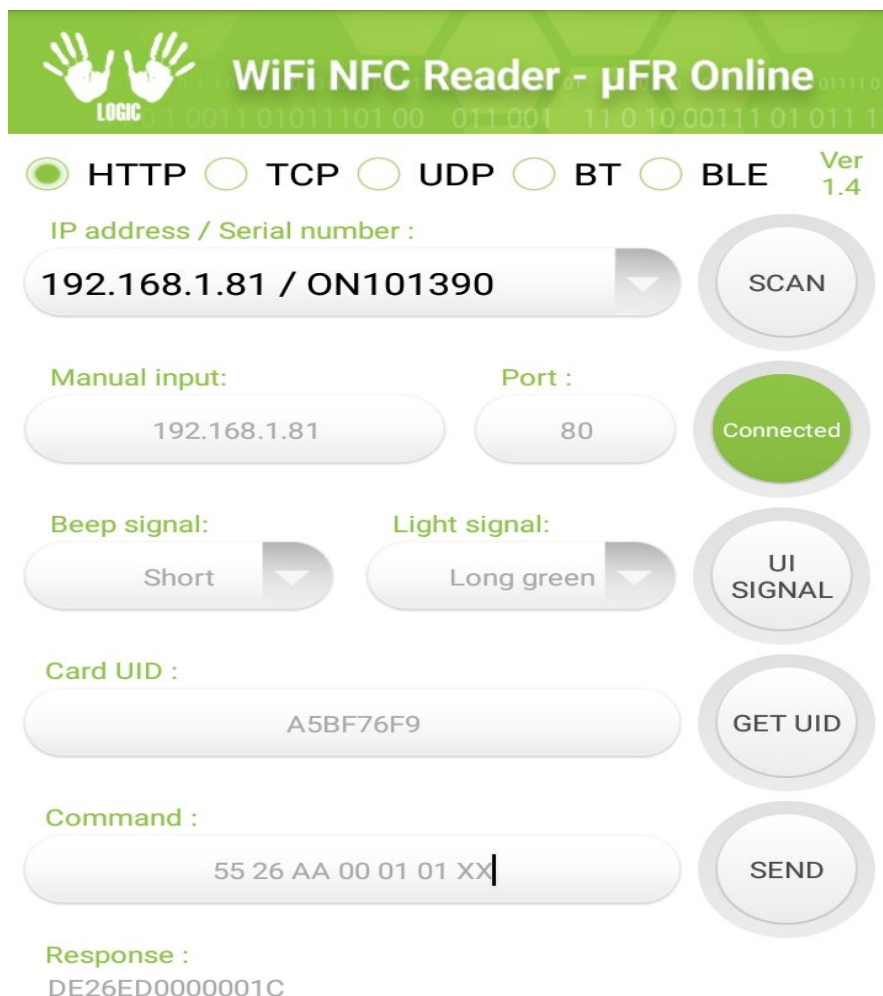


The screenshot shows the application interface for the 'WiFi NFC Reader - uFR Online'. At the top, there is a green header with the 'LOGIC' logo and the title 'WiFi NFC Reader - uFR Online'. Below the header, there are radio buttons for selecting the communication protocol: HTTP (selected), TCP, UDP, BT, and BLE. The version 'Ver 1.4' is displayed next to the BLE option. Below the protocol selection, there is a label 'IP address / Serial number :'. A dropdown menu is open, showing four options: '192.168.1.81 / ON101390', '192.168.1.81 / ON101390', '192.168.1.99 / ON101494', and '192.168.1.116 / ON101362'. To the right of the dropdown, there are four circular buttons: 'SCAN', 'Connected' (green), 'UI SIGNAL', and 'GET UID'. Below the dropdown, there are two text input fields: 'Card UID :' and 'Command :'. At the bottom, there is a 'Response :' label. A 'SEND' button is located at the bottom right of the interface.

The same thing will happen if you choose UDP or TCP/IP communication protocol. If HTTP protocol is selected, then port is always 80 by default.

If UDP or TCP/IP protocol is selected, you can modify the port by yourself. Note that if you work with HTTP, TCP/IP or UDP connection, button "CONNECT" will turn to "Connected" and it will become green.

You can also type hexadecimal command from uFR COM protocol to send it to reader. Simply type the command and click 'SEND' button. The picture below shows USER\_INTERFACE\_SIGNAL command sent to reader:








The screenshot shows the 'WiFi NFC Reader - uFR Online' web interface. At the top, there's a green header with the logo and title. Below the header, there are radio buttons for selecting a protocol: HTTP (selected), TCP, UDP, BT, and BLE. To the right of these is 'Ver 1.4'. Below the protocol selection, there's a text input field for 'IP address / Serial number' containing '192.168.1.81 / ON101390' and a 'SCAN' button. Further down, there are two input fields: 'Manual input' with '192.168.1.81' and 'Port' with '80'. To the right of these is a green 'Connected' button. Below that, there are two dropdown menus: 'Beep signal' set to 'Short' and 'Light signal' set to 'Long green'. To the right of these is a 'UI SIGNAL' button. Next is a 'Card UID' field containing 'A5BF76F9' and a 'GET UID' button. Below that is a 'Command' field containing '55 26 AA 00 01 01 XX' and a 'SEND' button. At the bottom, there's a 'Response' field showing 'DE26ED0000001C'.

You can also send command with delimiters and if you want automatic checksum calculation you can type 'XX' as the last byte in your command.

## Bluetooth

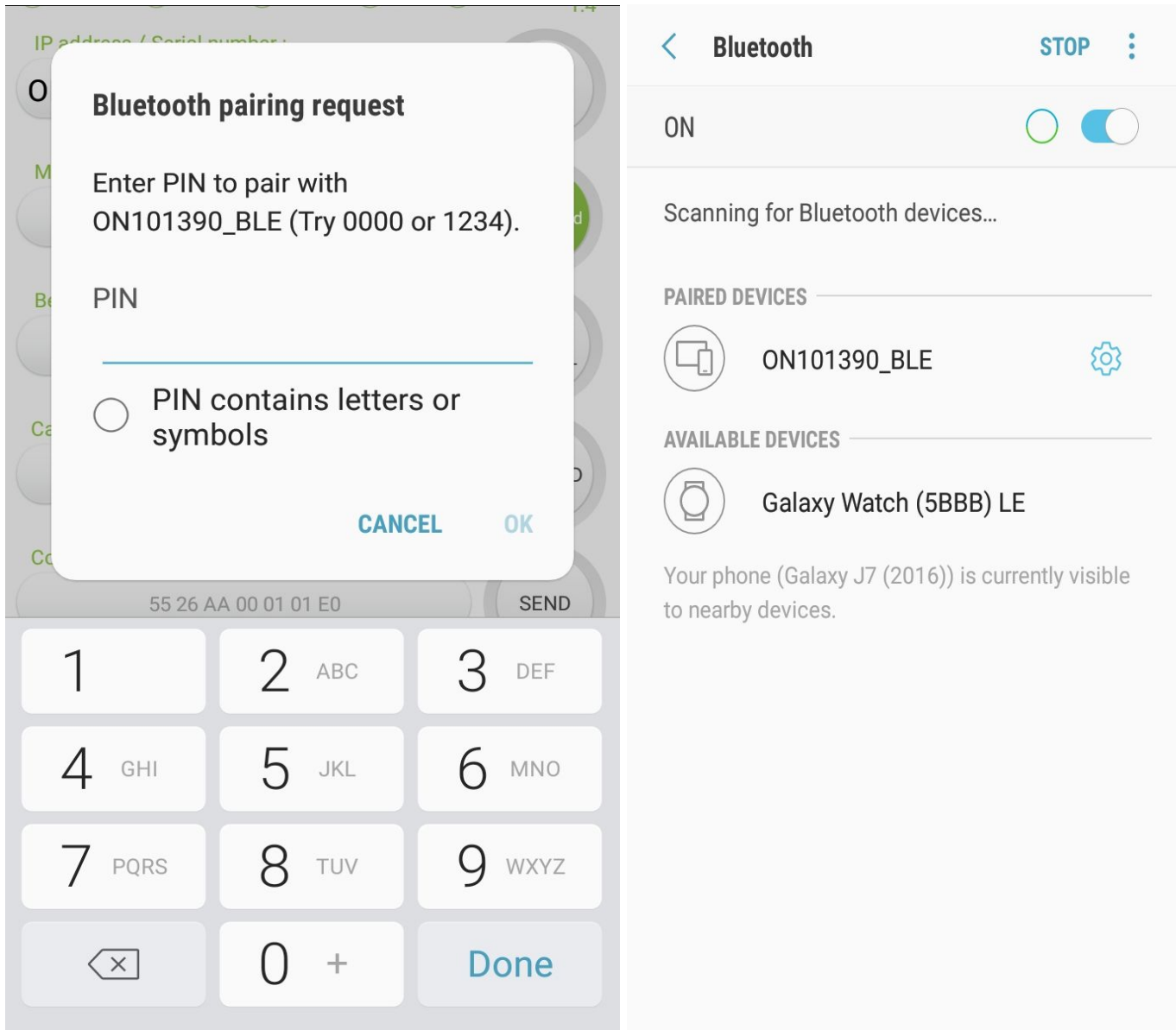
Before you start to use application with uFR Online readers in Bluetooth mode, you need to pair them with your phone. uFR Online devices in Bluetooth Serial mode have prefix “\_BT” and devices in Bluetooth Low Energy mode have prefix “\_BLE” in their name after serial number.

### Bluetooth serial pairing


Bluetooth	SCAN	
ON		
Make sure your Bluetooth device is in pairing mode to connect.		
AVAILABLE DEVICES		
	ON101390_BT Pairing...	
Your phone (Galaxy J7 (2016)) is currently visible to nearby devices.		
ON		
Make sure your Bluetooth device is in pairing mode to connect.		
PAIRED DEVICES		
	ON101390_BT	
AVAILABLE DEVICES		
No devices found		
Your phone (Galaxy J7 (2016)) is currently visible to nearby devices.		

## Bluetooth Low Energy pairing

In Bluetooth Low Energy pairing, when you select device you want to pair with it, you need to type device's PIN for pairing.



If you click on BT or BLE radio button application will ask for permission to turn Bluetooth ON, if it isn't already turned ON. After turning Bluetooth ON, you will be able to click "SCAN" button to see paired uFR Online readers with your phone. Choose device you want to work with and click "CONNECT" button.



**WiFi NFC Reader - μFR Online**

0011 01011101 00 011 001 11 0 10 00111 01 011 11

☐ HTTP 
 ☐ TCP 
 ☐ UDP 
 ☒ BT 
 ☐ BLE 
 Ver 1.4

IP address / Serial number : ON101390\_BT A4:CF:12:40:30:..

SCAN

Manual input: A4:CF:12:40:30:06 Port : 8881

CONNECT

Beep signal: Short Light signal: Long green

UI SIGNAL

Card UID :


GET UID

Command :

SEND

Response : DE26ED00000000

Connecting ... Please wait



**WiFi NFC Reader - μFR Online**

0011 01011101 00 011 001 11 0 10 00111 01 011 11

☐ HTTP 
 ☐ TCP 
 ☐ UDP 
 ☐ BT 
 ☒ BLE 
 Ver 1.4

IP address / Serial number : ON101390\_BLE A4:CF:12:40:30:..

SCAN

Manual input: A4:CF:12:40:30:06 Port : 80

CONNECT

Beep signal: Short Light signal: Long green

UI SIGNAL

Card UID :

GET UID

Command :

SEND

Response :



When you click "CONNECT" button, wait until device is connected, and then you will be able to work with uFR Online reader. If device is successfully connected "CONNECT" button will become green.



**WiFi NFC Reader - μFR Online**

☐ HTTP ☐ TCP ☐ UDP ☒ BT ☐ BLE Ver 1.4

IP address / Serial number :

ON101390\_BT A4:CF:12:40:30:...

SCAN

Manual input: A4:CF:12:40:30:06

Port : 80

Connected

Beep signal: Short

Light signal: Long green

UI SIGNAL

Card UID : A5BF76F9

GET UID

Command : 55 26 AA 00 01 01 E0

SEND

Response : DE26ED0000001C



**WiFi NFC Reader - μFR Online**

☐ HTTP ☐ TCP ☐ UDP ☐ BT ☒ BLE Ver 1.4

IP address / Serial number :

ON101390\_BLE A4:CF:12:40:30:...

SCAN

Manual input: A4:CF:12:40:30:06

Port : 80

Connected

Beep signal: Short

Light signal: Long green

UI SIGNAL

Card UID : A5BF76F9

GET UID

Command : 55 26 AA 00 01 01 E0

SEND

Response : DE26ED0000001C

## Revision history

Date	Version	Comment
2019-06-17	1.4	Base document